

CC sent to Mr. Merry

US EPA RECORDS CENTER REGION 5



458677

April 21, 1965

Attn: Mr. T. Fought
Cassaga County Engineer
Court House
Chardon, Ohio

Dear Mr. Fought,

Attached is the report requested by your Mr. Davidson, covering the present disposal systems of the effluent from our facilities. This report will be in three (3) parts, each part covering a separate building.

Part One will cover Plant #1, which is the long Northeast brick building which houses the Regal warehouses, production, shipping, and boiler facilities.

Part Two will cover the general offices, and the water analysis laboratories.

Part Three will cover Plant #2 which is the General Biochemicals production, receiving, and shipping facilities (concrete block building South of Oak Street).

Mr. Davidson, also questioned as the probable location of our "tie-ins".

It looks like we will need two different "tie-in" spots. The 1st would be near the Northeast corner of our property. (That is at the corner of Arch Street and Pine Street) The 2nd would be at the corner of Oak and Clinax Street.

We trust that this report contains sufficient information for your planning, however, should you have any additional questions, please feel free to call me at 247-4300.

Yours truly,

GENERAL BIOCHEMICALS

LABORATORY PARK

CHAGRIN FALLS, OHIO

DTT
Mr. Herbert H. Davidson
Plant Manager

HR/iw

Enclosures

CC. RAY FOGG - CONTRACTOR.

Severs - spring 1966.

"GENERAL DISPOSAL REPORT CONTINUED"

PART THREE

GENERAL BIOCHEMICALS
(Plant #2)

This building consists of various sewer lines which discharge in three (3) different areas.

- (1) The sanitary sewer which includes sink drains from both men's and ladies locker rooms along with the toilet facilities, are handled by a septic tank located South of our present South fence line.
- (2) Two roof drains and some floor drains including those from the Dist Preparation Lab and the sink from the Organic Chemical Lab, all discharge into an open trench located off the Southwest corner of our present building. An Analysis and estimated flow rate of this line will be enclosed and titled as "DISCHARGE FROM FLOOR DRAINS OF PLANT #2".
- (3) The boiler blow down, 3 roof drains, and the cooling water from processing equipment, (condensers, aspirators, etc.) all discharge into an open ditch off the Southeast corner of Plant #2. This water always runs clear with no odor, and sometimes runs as high as 10 gallons per minute from the cooling condensers.

Also involved is the disposal of solid and sludge waste from processing.

The solid food material is drained in paste board or metal drums, and either buried on our premises or disposed of in a "land fill" dump.

The sludges which result from Organic processing is buried on our premises. These are small in quantity (Est. 5 Gal./Day) and will vary from a Phenolic-Protein mixture to an organic tar residue.

"GENERAL DISPOSAL REPORT CONTINUED"

DISCHARGE FROM FLOOR DRAINS-PLANT #2

- I. Discharge is to an open trench approximately 20 feet Southwest of the Southwest corner of our fence area.
- II. Two normal production days were picked. Flow rates were measured and samples were taken for analysis.
- III. This report covers 1st. shift only (21 employees). A 2nd shift is in operation with 2-3 employees.
- IV. The flow rate for 2nd shift would not exceed 1 Gallon per minute.
- V. March 30th, 1965, 7 samples were taken at one hour intervals and combined for analysis #1. March 31st, 1965, 8 samples were taken at one hour intervals and combined for analysis #2.

ANALYSIS	#1	#2	ANALYSIS	#1	#2
AVERAGE G.P.M. FLOW RATE	2.4	3.5	TOTAL ALKALINITY	170	104
TOTAL HARDNESS	216	216	CHLORIDES	57	57
CALCIUM	128	128	SULFATE	44	44
MAGNESIUM	88	88	TOTAL DISSOLVED SOLIDS	323	630
IRON	0	0	pH	7.3	6.6
SILICA	20	20	SLUDGE	LOW	TRACE
PHOSPHATE	35	14	COLOR	TURBID	TURBID
PHENOL ALKALINITY	0	0	SULFIDES	PRESENT	PRESENT

Total Hardness, Calcium, Magnesium, Phenol, Alkalinity and Total Alkalinity reported as equivalent CaCO₃. Results above are expressed in parts per million. To convert to grains per gallon divide by 17.1.

Industrial Waste Effluent Assays

General Biochemicals, Div

October & November 1964

Assays made on composite samples collected hourly over an eight hour period during the working day, except for the chlorine assays which are made immediately after taking the sample.

	10/31/64		11/30/64	
	9:30 AM	4:00 P.M.	9:30 AM	4:00 P.M.
Residual Chlorine	.6	.9	.8	.5
pH		9.3		8.4
Phenol Alkalinity		160		8
Total Alkalinity (in p.p.m. as CaCO ₃)		472		314
Oil & Grease mg/L		none		none
Total Dissolved Solids in ppm		1368		585
Chlorides		128		64
Total Hardness in ppm Total		172		144
Ca		88		84
Mg		84		60
Iron		0		0
Silica		26		20
Phosphate		12		5
Volume of Flow in Gal/Hr Average 8 hrs.		425		393
Color		none		none
Temperature		71° F.		52° F.
Settleable Solids in ml/L		2.6		1.1

INDUSTRIAL WASTE EFFLUENT ASSAYS

General Biochemicals, Div.

December & January 1965

Assays made on composite samples collected hourly over an eight hour period during the working day, except for the chlorine assays which are made immediately after taking the sample.

	12/31/64		1/29/65	
	9:30 AM	4:00 PM	9:30 AM	4:00 PM
Residual Chlorine	1.0	0.4	0.1	0.4
pH		8.2		10.6
Phenol Alkalinity		0		212
Total Alkalinity (in p.p.m. as CaCO ₃)		282		584
Oil & Grease mg/L		none		none
Settleable Solids		1.5		.6
Total Dissolved Solids in ppm		842		1070
Total Hardness in ppm Total		160		184
Ca		88		96
Mg		72		88
Iron		0		0
Silica		20		28
Phosphate		4.0		2.5
Volume of Flow in Gal/Hr Average 8 hrs.		320		415
Color		none		none
Temperature		68°F.		52°F.
Chloride		106		78

INDUSTRIAL WASTE EFFLUENT ASSAYS

General Biochemicals, Div.

February & March 1965

Assays made on composite samples collected hourly over an eight hour period during the working day, except for the chlorine assays which are made immediately after taking the sample.

	2/26/65		3/31/65	
	9:30 AM	4:00 PM	9:30 AM	4:00 PM
Residual Chlorine	.8	.5	1.3	.7
pH		7.3		8.2
Phenol Alkalinity		0		0
Total Alkalinity (in p.p.m. as CaCO ₃)		242		232
Oil & Grease mg/L		none		none
Settleable Solids		.6		.2
Total Dissolved Solids in ppm		520		632
Total Hardness in ppm Total		172		268
Ca		96		192
Mg		76		96
Iron		0		0
Silica		22		16
Phosphate		5.0		1.0
Volume of Flow in Gal/Hr Average 8 hrs.		315		325
Color		none		none
Temperature		40°F.		52°F.
Chloride		71		57

INDUSTRIAL WASTE EFFLUENT ASSAYS

General Biochemicals, Div.

April and May, 1965

Assays made on composite samples collected hourly over an eight hour period during the working day, except for the chlorine assays which are made immediately after taking the sample.

	4-30-65		5-28-65	
	9:30 a.m.	4:00 p.m.	9:30 a.m.	4:00 p.m.
Residual Chlorine	.2	.6	.2	.8
pH		7.5		7.1
Phenol Alkalinity		-0-		-0-
Total Alkalinity (in p.p.m. as CaCO ₃)		176		174
Oil & Grease mg/L		none		none
Settleable Solids		.5		.8
Total Dissolved Solids in ppm		612		750
Total Hardness in ppm Total		244		348
Ca		160		212
Mg		84		136
Iron		-0-		-0-
Silica		18		16
Phosphate		6		5
Volume of Flow in Gal/Hr. Average 8 hours		362		380
Color		none		none
Temperature		64°F.		58°F.
Chloride		99		71

Hasbrouck

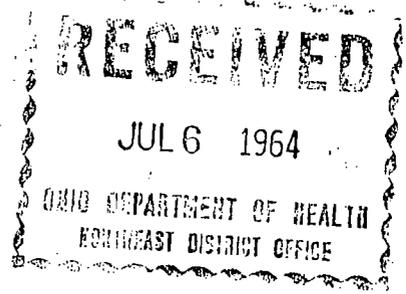
Re: Geauga County
Bainbridge Township
Ind. Wastes-Sew.

July 3, 1964

General Biochemicals, Inc.
Pine and Climax Streets
Chagrin Falls, Ohio

Attention Mr. Herbert H. Davidson, Plant Supt.

Gentlemen:



Enclosed is renewal permit for the discharge of industrial wastes and sanitary sewage from your establishment into the "waters of the state" pursuant to the provisions of the Water Pollution Control Act and to the statement of policy of the Board dated February 24, 1953.

You will note that this permit expires May 1, 1965. Renewal of this permit is contingent upon compliance with the following condition:

The satisfactory maintenance and operation of the industrial wastes treatment and sanitary sewage treatment facilities, respectively; submitting to the Division of Engineering, Ohio Department of Health, at bimonthly intervals (July, September, November, January, March, May), reports to include information and analytical data pertinent to the operation and to the performance of the industrial wastes treatment facilities.

Your company is warranted in continuing to participate in the effort to establish a county sewer district in Bainbridge Township which will provide sewerage facilities to which your industrial wastes and sanitary sewage may be made tributary to the Chagrin Falls sanitary sewerage system. In the event this is accomplished, your company would be exempt from permit pursuant to the provisions of the Water Pollution Control Act.

Should you have any questions with respect to the above condition, please notify us promptly.

Yours very truly,

Enc.-Permit 1185.7
Certified mail
cc: Health Commissioner
cc: District Office

E. W. Arnold, M.D., Chairman
Water Pollution Control Board

June 30, 1965

Re: Geauga County
Rainbridge Township

General Biochemicals, Inc.
Piso and Climax Streets
Chegria Falls, Ohio

Attention: Mr. Herbert H. Davidson
Plant Superintendent

Gentlemen:

On June 29, 1965 an inspection was conducted of the domestic sewage treatment facilities serving the existing Plant #2.

It is noted that a large septic tank and subsurface filter of some description presently serve the 20 to 25 employees working in Plant #2. This inspection was prompted by the proposal to expand Plant #2 and move the existing laboratories into a new wing south of the existing wing with the existing wing to be converted to storage space. The number of employees will remain the same.

Effluent from the subsurface filter, while a mere trickle, did not appear to be of very high quality. However, considerable dilution is attained since the filter underdrain discharges into the main condenser cooling water stream. We would, therefore, consider the existing facilities to be adequate for the time being in light of the proposed County Sanitary Sewer which should serve the area within the next year or so. It is understood that connection will be made to the sanitary sewers as soon as they are available.

Construction of the new wing should proceed on this basis.

Yours truly,

R. J. Manson
District Sanitary Engineer

RJM-sm

cc: Ray Fogg

Gauga County Health Department

Gauga County Sanitary Engineer